

REMARKS

The Examiner has objected to claims 2-8, 10-14, 17, 18, 20, 22, 23 and 25. It will be shown below that the independent claims from which these dependent claims depend are all allowable over the reference cited by the Examiner. However, the Applicants reserve the right to amend one or more these dependent claims to be independent claims at a later date.

Claims 1, 9, 15, 16 and 21 are all rejected under 35 U.S.C. 102(e) as being anticipated by Moon et al. (US 6,577,608 B1). This rejection is respectfully disagreed with, and is traversed below.

The Examiner characterizes Moon et al. as teaching a searcher block (110 in Fig. 10) being one of enabled for operation or disabled from operation in accordance with the value of I_o , and refers to various passages and Figures of Moon et al. in this regard. It is submitted that Moon et al. has no such teaching.

Instead, the searcher block 110 of Moon et al. appears to be enabled and disabled based on *a priori* knowledge of the transmission schedule of the base station to the mobile station. For example, Moon et al. state in col. 6, lines 63-67:

"By previously scheduling the time slot of the paging message for the specific mobile station, the mobile station can make a transition to a sleep mode for all other slot times (i.e. non-scheduled time slots) to save battery power. The mobile station demodulates the paging message at the paging slot duration and simultaneously, performs an idle search for set maintenance and handoff."

Moon et al. also state in col. 7, lines 30-50, in reference to Fig. 3:

"Therefore, in the mobile station, an RF/analog stage is awoken from the sleep mode at a duration 331 preceding a target pilot signal duration and enables a searcher at a duration shown by reference numeral 35 to perform channel tuning. Furthermore, after storing the sampled data at the duration 341, the mobile station disables the RF/analog stage by cutting off the power supply voltage, to save power. Thereafter, the mobile station again provides the power supply voltage to the RF/analog stage at a duration 332 and enables a finger as

represented by reference numeral 36....

As described above after storage of sample data, the searcher in the mobile station is awoken from the sleep mode to start the search operation as represented by reference numeral 35."

Further by example, and with reference to Fig. 4, Moon et al. state at col. 9, line 53, to col. 10, line 7:

"For the search operation, the mobile station should sample data from the high power pilot signal to be transmitted immediately before transmission of the information bit of the quick paging channel, represented by reference numeral 43, and store the sampled data. To this end, the RF/analog stage of the mobile station is awoken from the sleep mode before a transmission time of the high power pilot signal, to perform sampling and store the sample data. After storage of the sampled data, the RF/analog stage is not provided with the power supply voltage and thereafter, is awoken again from the sleep mode to demodulate the quick paging channel.

After completion of sampling, a searcher is awoken to initiate searching, as represented by reference numeral 46, and upon acquisition of a pilot signal, detects a multipath signal component to assign the detected multipath signal to a finger, in order to receive the quick paging channel. That is, the finger should be awoken from the sleep mode prior to assignment of the multipath signal to the finger, as represented by reference numeral 47, and a combiner should be also awoken to manage timing of the mobile station and to demodulate the quick paging channel information bit."

Note that in Figs. 11-14 that Moon et al. describe an energy calculation performed by the searcher 110. For example, see col. 16, lines 17-24:

"To calculate energy of the despread signal, the energy calculator 156 calculates the sum of the despread signals for I and Q arms (i.e., $I^2 + Q^2$). This value is E_c/I_0 of a received pilot channel, where E_c represents energy per chip of the received signal and I_0 represents a power spectral density of the received total CDMA signal."

Reference can also be made to col. 16, lines 51-61; col. 17, lines 19-21; col. 18, lines 7-16; and col. 19, lines 15-25 and 52-54.

However, nowhere does Moon et al. expressly disclose or suggest that I_o is used in such a manner as claimed, e.g.: "a searcher that is one of enabled for operation or disabled from operation in accordance with the value of I_o ", as in claim 1; or "enabling or disabling a searcher for operation in accordance with the value of I_o ", as in claim 9; or "using the maximum value of I_o to identify one of m segments of the searcher buffer on which a searcher is to be enabled for operation" as in claim 15; or "selectively one of generating or not generating a searcher trigger signal in accordance with the value of I_o , wherein when generated the searcher trigger signal causes a searcher to process the stored samples" as in claim 16; or "a signal processor circuit for determining, during a time that the samples are being stored in said memory, an instantaneous total received power (I_o) of the received CDMA signal for selectively one of generating or not generating a searcher trigger signal in accordance with the value of I_o , wherein when generated the searcher trigger signal causes a searcher to process the stored samples", as in claim 21.

This being the case all of the independent claims are clearly allowable over Moon et al., and thus all of the pending claims are in condition for allowance, whether Moon et al. is considered alone or in combination with Eriksson et al. (US 6,563,891, without admitting that the Examiner's characterization of Moon et al., and his rationalization for using Eriksson et al., is technically accurate).


The Examiner is respectfully requested to reconsider and remove the rejections of the claims under 35 U.S.C. 102(e) and 103 based on Moon et al. and Moon et al. in view of Eriksson et al., and to allow claims 1-25 as filed.

Claims 26-33 are newly added, and should also be found to be in condition for allowance.

An early notification of the allowability of claims 1-33 is earnestly solicited.

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